LG Electronics

zenith

SERVICE MANUAL

Product Type:	PLASMA
Manual Part#:	923-03472
Chassis:	PDP 40”
Product Year:	2001

Model Series:

DPDP40
MU40PA10B

Service Manual is a part the Service Kit. Manual is to remain with Service Kit.

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PRODUCT SAFETY GUIDELINES

IMPORTANT SAFETY NOTICE

This manual was prepared for use only by properly trained audio-visual service technicians.

When servicing this product, under no circumstances should the original design be modified or altered without permission from Zenith Electronics Corporation. All components should be replaced only with types identical to those in the original circuit and their physical location, wiring and lead dress must conform to original layout upon completion of repairs.

Special components are also used to prevent x-radiation, shock and fire hazard. These components are indicated by the letter "x" included in their component designators and are required to maintain safe performance. No deviations are allowed without prior approval by Zenith Electronics Corporation.

Circuit diagrams may occasionally differ from the actual circuit used. This way, implementation of the latest safety and performance improvement changes into the set is not delayed until the new service literature is printed.

CAUTION: Do not attempt to modify this product in any way. Never perform customized installations without manufacturer's approval. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury.

Service work should be performed only after you are thoroughly familiar with these safety checks and servicing guidelines.

GRAPHIC SYMBOLS

The exclamation point within an equilateral triangle is intended to alert the service personnel to important safety information in the service literature.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the service personnel to the presence of noninsulated "dangerous voltage" that may be of sufficient magnitude to constitute a risk of electric shock.

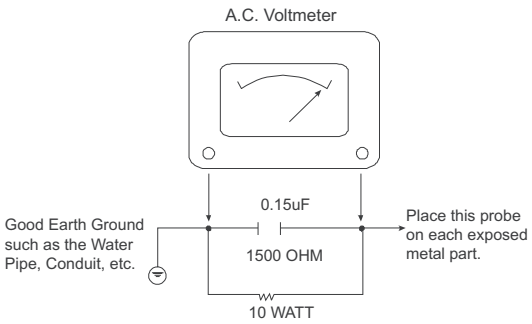
The pictorial representation of a fuse and its rating within an equilateral triangle is intended to convey to the service personnel the following fuse replacement caution notice:
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ALL FUSES WITH THE SAME TYPE AND RATING AS MARKED NEAR EACH FUSE.

SERVICE INFORMATION

While servicing, use an isolation transformer for protection from AC line shock. After the original service problem has been corrected, make a check of the following:

FIRE AND SHOCK HAZARD

1. Be sure that all components are positioned to avoid a possibility of adjacent component shorts. This is especially important on items transported to and from the repair shop.
2. Verify that all protective devices such as insulators, barriers, covers, shields, strain reliefs, power supply cords, and other hardware have been reinstalled per the original design. Be sure that the safety purpose of the polarized line plug has not been defeated.
3. Soldering must be inspected to discover possible cold solder joints, solder splashes, or sharp solder points. Be certain to remove all loose foreign particles.
4. Check for physical evidence of damage or deterioration to parts and components, for frayed leads or damaged insulation (including the AC cord), and replace if necessary.
5. No lead or component should touch a receiving tube or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. After reassembly of the set, always perform an AC leakage test on all exposed metallic parts of the cabinet (the channel selector knobs, antenna terminals, handle and screws) to be sure that set is safe to operate without danger of electrical shock. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST. Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm, 10 watt resistor, paralleled by a .15 mfd 150V AC type capacitor between a known good earth ground water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and .15 mfd capacitor. Reverse the AC plug by using a non-polarized adaptor and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



X-RADIATION

1. Be sure procedures and instructions to all service personnel cover the subject of x-radiation. The only potential source of x-rays in current TV receivers is the picture tube. However, this tube does not emit x-rays when the HV is at the factory-specified level. The proper value is given in the applicable schematic. Operation at higher voltages may cause a failure of the picture tube or high-voltage supply and, under certain circumstances may produce radiation in excess of desirable levels.
2. Only factory-specified CRT anode connectors must be used.
3. It is essential that the service personnel have available an accurate and reliable high-voltage meter.
4. When the high-voltage circuitry is operating properly, there is no possibility of an x-radiation problem. Every time a color chassis is serviced, the brightness should be run up and down while monitoring the high voltage with a meter, to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. When troubleshooting and making test measurements in a product with a problem of excessively high voltage, avoid being unnecessarily close to the picture tube and the high voltage power supply. Do not operate the product longer than necessary to locate the cause of excessive voltage.
6. Refer to HV, B+, and shutdown adjustment procedures described in the appropriate schematics and diagrams (where used).

IMPLOSION

1. All direct view picture tubes are equipped with an integral implosion protection system; take care to avoid damage during installation.
2. Use only the recommended factory replacement tubes.

TIPS ON PROPER INSTALLATION

1. Never install any receiver in a closed-in recess, cubbyhole, or closely fitting shelf space over, or close to, a heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as: outdoor patio installations where dew is a factor, near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct venting. The customer should also avoid the use of decorative scarves or other coverings that might obstruct ventilation.
4. Wall- and shelf-mounted installations using a commercial mounting kit must follow the factory-approved mounting instructions. A product mounted to a shelf or platform must retain its original feet (or the equivalent thickness in spacers) to provide adequate air flow across the bottom. Bolts or screws used for fasteners must not touch any parts or wiring. Perform leakage tests on customized installations.
5. Caution customers against mounting a product on a sloping shelf or in a tilted position, unless the receiver is properly secured.
6. A product on a roll-about cart should be stable in its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against using a cart or stand that has not been listed by Underwriters Laboratories, Inc. for use with its specific model of television receiver or generically approved for use with TVs of the same or larger screen size.
8. Caution customers against using extension cords. Explain that a forest of extensions, sprouting from a single outlet, can lead to disastrous consequences to home and family.

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GENERAL INFO

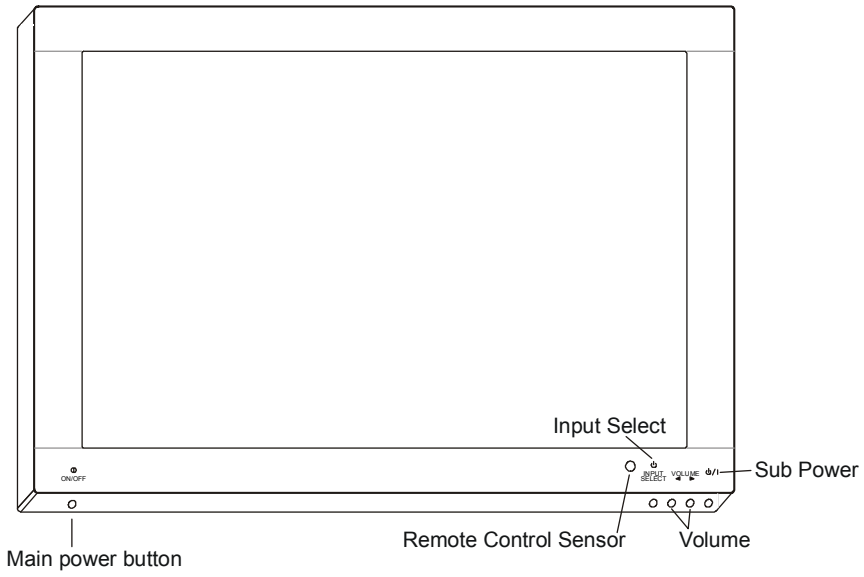
SPECIFICATIONS

Screen Size	40 in/101 cm diagonal
Aspect Ratio	4 :3 (width:height)
Resolution	640 x 480 pixels
Peak Brightness	typ.330cd/m² (with 45%filter)
Contrast Ratio	550:1(Dark Room with 45% filter)
Viewing Angle	160° horizontally and vertically
Displayable Colors	16.7 million
Weight	32.55kg(MNT), 6.45kg(D/Stand), 3.1kg(Spk.)x2
Life	>25,000 hours (elapsed time to 50% of initial brightness)
Dimensions(MNT)	930cm wide, 71.1cm high, 7.8cm deep
(SPK)	12cm wide, 71.1cm high, 7.8cm deep
Input Terminals	RF terminal(NTSC)
	Composite Video input(RCA) X 2, S-Video
	Audio L&R input(RCA) X 2
	Component Video (Y,Cb,Cr) + R/L for DVD
	Component Video (Y,Pb,Pr)+ R/L for HDTV Stb.
	RGB-SUB 15 pin for HDTV Stb.(480p/720p/1080i)
	Analog RGB-SUB 15pin(PC VGA ~SVGA)
	Stereo Input for PC Audio
Output Terminals	RGB-SUB 15 pin(PC/DTV1 out : bypass)
	Audio L&R(RCA) & Woofer Sound out(option)
	RGB-SUB 25 Pin for MNT(RGB/HV in & Control)
	Composite Video output + R/L output
Input Terminals	Analog RGB-SUB 15 pin (PC VGA ~SVGA)
	RGB-SUB 25 Pin for STB(RGB/HV in & Control)
	Component Video (Y/Y,Pb/Cb,Pr/Cr) for HD(SD)TV Stb & DVD
	Composite Video input
	Audio L&R input(RCA) X 2
Display Frequency	15.73kHz to 60kHz horizontally, 50Hz to 70Hz(V)
Picture	DRP, Digital 3D Comb filter, LTI/CTI
Sound	A2 stereo, Dolby Virtual, AVL, 2x10Wrms(woofer:opt.)
Remote Control	Included(Unified)
External Control	D-sub 25-pin connector
Power Source	220V / 50 Hz
Power Consumption	310 watts(with Max. Audio : 330W)

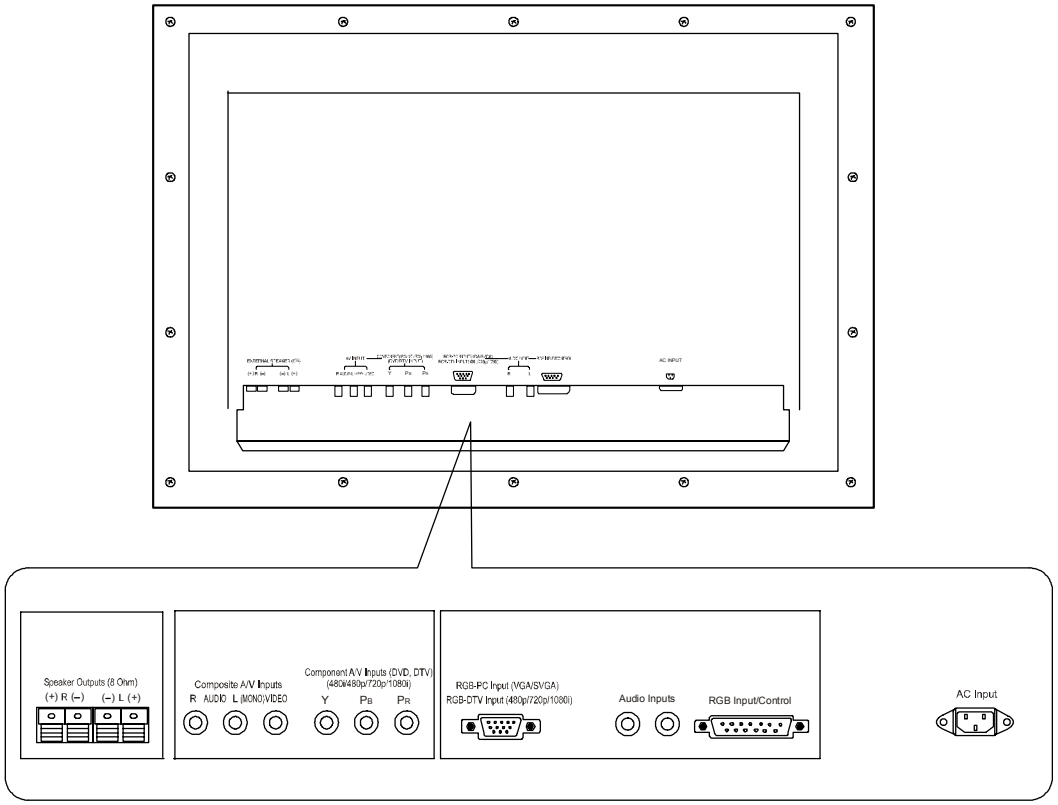
*Designs and specifications are subject to change without notice.

*Weight and dimensions shown are approximate.

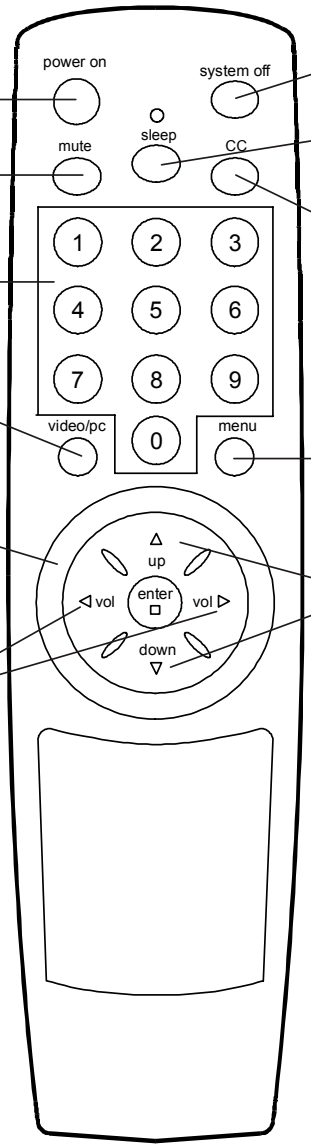
FRONT


Input Select
Sub Power
Main power button
Remote Control Sensor
Volume

BACK


Speaker Outputs (8 Ohm)
(+) R (–) (–) L (+)
Composite A/V Inputs
R AUDIO L (MONO)/VIDEO
Component A/V Inputs (DVD, DTV)
(480i/480p/720p/1080i)
Y PB PR
RGB-PC Input (VGA/SVGA)
RGB-DTV Input (480p/720p/1080i)
Audio Inputs
RGB Input/Control
AC Input

REMOTE



POWER ON
Toggles the on on and off.

MUTE
Toggles the sound on and off.

NUMBER PAD
Selects channels directly.

VIDEO PC
Toggles through available video inputs. Composite, Component, RGB-PC, & RGB-DTV

THUMBSTICK
Navigates the on-screen menus and adjusts system settings and preferences. Use the arrows to navigate menus and press the center to select.

VOLUME UP/DOWN
Increases/decreases the sound level.

SYSTEM OFF
Toggles the current component power on/off.

SLEEP
Turns sound Off and On while picture remains.

CC
Displays closed caption menu.

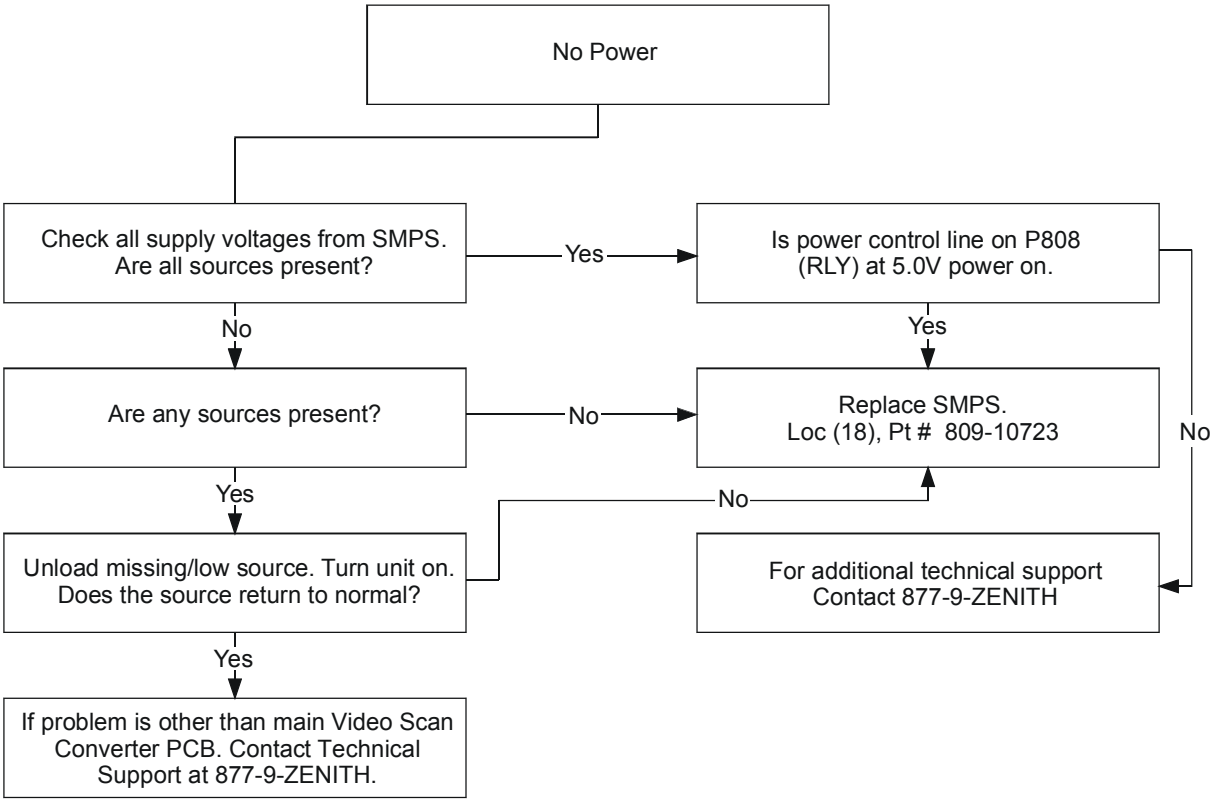
MENU
Displays menus and advances through the different menus available.

CHANNEL (Up/Down)
Selects next channel in TV's memory or scrolls up/down in GUIDE Plus+ Gold.

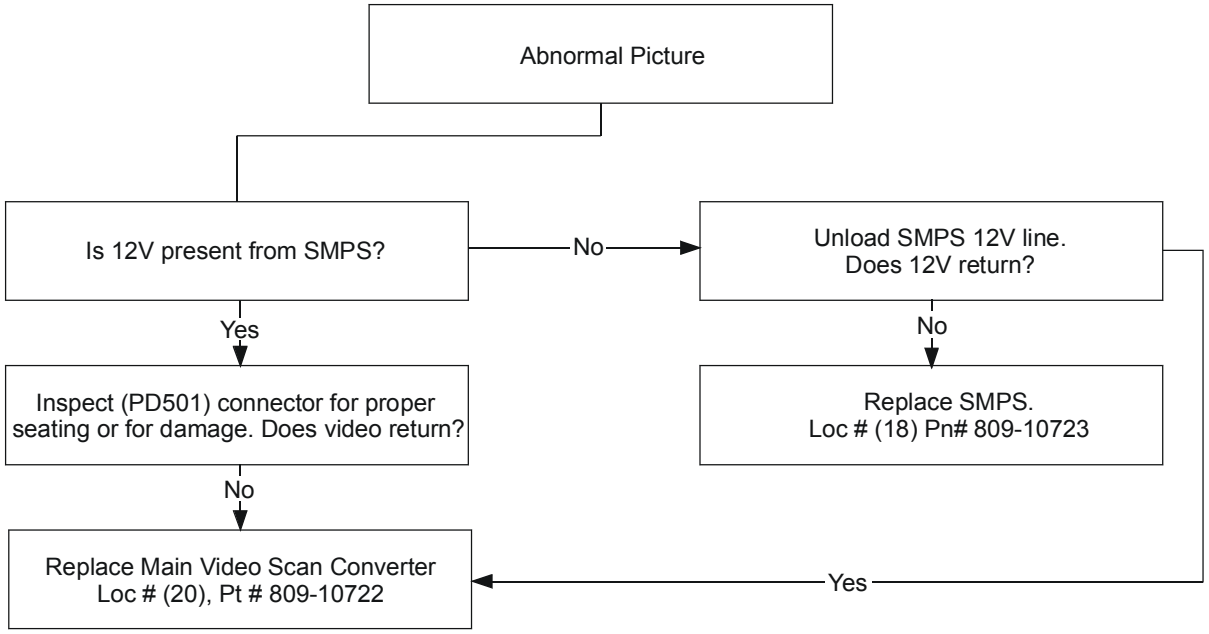
924-10107

TROUBLESHOOTING

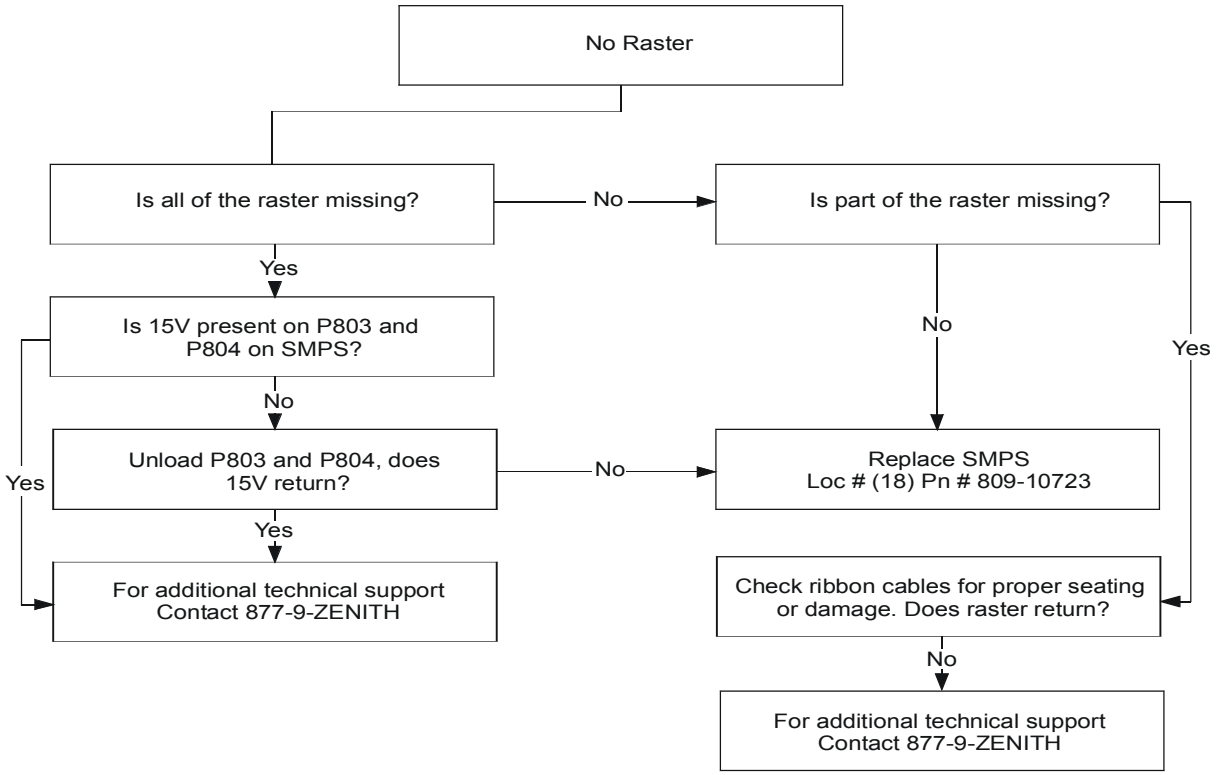
NO POWER



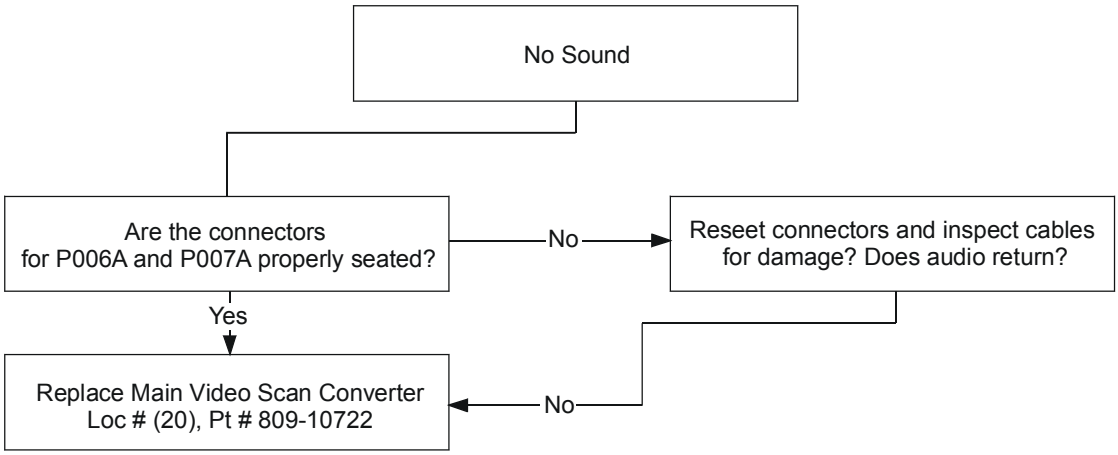
ABNORMAL PICTURE



NO RASTER



NO SOUND



ADJUSTMENT INSTRUCTIONS

PRECAUTIONS

Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instruments. Adjustments must be done in the correct order. They must be performed in the at a temperature of 25±5°C and 65±10% of relative humidity. The input voltage of the receiver must keep 220/230V, 50/60Hz in adjusting. and the receiver must be operated for about 15 minutes prior to the adjustment.

After receiving 100% white pattern, the receiver must be operated prior to adjustment (Or white condition in HEATRUN mode). Then enter into HEAT-RUN mode and select the HEAT-RUN OFF by pressing ADJ button on Remote Control for adjustment. Press the VOL + button in HEAT-RUN OFF (OSD display HEAT-RUN WHITE and screen display 100% full WHITE PATTERN). Set is activated HEAT-RUN without SET TOP BOX or signal generator in this mode. [Single color pattern of HEAT-RUN mode uses to check PANEL (RED/BLUE/GREEN).

Caution - A still screen for more than 20 minutes may cause an aftter image in the black level part of the screen.

VOLTAGE ADJUSTMENT

Test Equipment: D.M.M 1EA

Va Adjusment(Address Voltage Adjusment)

1. Connect pin 1 of P806 or P811 to (+) jack of D.M.M.
2. After turning the VR803(Va Adj), voltage of D.M.M adjustment as same as Va voltage which on label of panel right/bottom.(Deviation : ±0.5V)

Vs Adjustment

1. Connect pin 9 of P803 to (+) jack of D.M.M.
2. After turning the VR804(Vs Adj), voltage of D.M.M adjust as same as Vs voltage which indicated on label of panel right/bottom.(Deviation : ±0.5V)

VSC Adjustment

1. Connect pin 4 of P802 to (+) jack of D.M.M.
2. After turning the VR806(VSC Adj), voltage of D.M.M adjust as same as Vs voltage which indicated on label of panel right/bottom.(Deviation : ±0.5V)

VSETUP Adjustment

1. Connect pin 1 of P802 to (+) jack of D.M.M.
2. After turning the VR805(VSETUP Adj),voltage of D.M.M adjust as same as Vs voltage which indicated on label.

ADJUSTMENT OF RGB CUT OFF

1. Select A/C SRT (cut-off automatic adjustment) by pressing SVC button on Remote Control for adjustment.
2. Press the VOL + or VOL - button.
3. It displayed all of the black on the screen and then adjustment is started.
4. If adjustment is finished, exit from adjustment mode by pressing A/V button.

White Balance should be done after RGB cut-off become adjustment. Operate the Zero-calibration of the CA-100, then stick sensor to PDP module surface when you adjust.

1. Select WHITE PATTERN of HEAT RUN mode by pressing SVC button on Remote Control for adjustment then operate HEAT RUN more than 15 minute.
2. Supply window Signal in pattern generater. [When adjustment is operated manually, operate process (3) or (6) regular sequence, when adjustment is operated automatically operate process (1)~(2).
3. To adjust Low Light, stick sensor to pattern(Dark), select the R cut/B cuby pressing SVC button on Remote Control for adjustment and adjust it until color coordination becomes X=0.280±0.003, Y=0.310±0.003 and color temperature becomes 8.800cK ± 500cK by pressing VOL+, - button. (G-cut fixation) (4) To adjust High Light, stick sensor to pattern(White). Select the R Gain/G Gain(adjustment 6) by pressing SVC button on Remote Control for adjustment and adjust R Gain/G Gain until color coordination becomes X=0.280±0.003, Y=0.310±0.003 and color temperature becomes 8.800cK ± 500cK.(B-Gain fixation)
5. Confirm the result of the High Light adjustment. If the deviation of High Light occur, operate the adjustment of Low Light and High Light again.
6. Exit adjustment mode using AV button.

COLOR TEMPERATURE ADJUSTMENT

Required Equipment: Color Analyzer(CA-110, CA-100 or same production).

Connection diagram of equipment for measuring

1. To adjust the deviation of the STB signal output.
2. Use regular PDP Monitor(JIG).

Adjustment Method

1. Connect the STB to regular PDP Monitor. Operate the zero-calibration of the CA-100, then stick sensor to surface of PDP module when you adjust.
2. Select ITE PATTERN of HEAT RUN mode by pressing SVC button on Remote Control for adjustment, then operate HEAT RUN more than 15 minute. (Operate the HEAT RUN to adjust the STB at first, then if OFF hour don't keep more than 3 minutes, operate next adjustment of the STB without HEAT RUN.)

3. Supply window Signal to TD-710 in pattern generator. [When adjustment is operated manually, operate process (3) to (7) regular sequence, when adjustment is operated automatically perate process (1) to (2).
4. Select STB CXA2101 by pressing SVC,ADJUST button on Remote Control for adjustment.
5. To adjust Low Light, stick sensor to 9th pattern(Dark). Select the B Cut/R Cut, then adjust the B Cut/R Cut until color coordination becomes X=0.280±0.003, Y=0.310±0.003 and color temperature becomes 8.800cK ± 500cK by pressing VOL+, - button. (Adjust in B Cut 10±1, R Cut 6±1)
6. To adjust High Light, stick sensor to 2th pattern(White). Select the R Gain/G Gain, then adjust the R Gain/G Gain until color coordination becomes X=0.280±0.003, Y=0.310±0.003 and color temperature becomes 8.800cK ±500cK. (B-Gain fixation)
7. Confirm the result of the High Light adjustment. If the deviation of High Light occur, operate the adjustment of Low Light and High Light again. (Expectation average adjustment data : B-Cut & RCut= 6±2, R-Gain/G-Gain=25±3)
8. Exit adjustment mode using A/V button.

ADJUSTMENT OF VIF-VCO COIL

RF Signal generator

- If any model don t have SECAM-L/L System, you should not operate adjustment of VR101.
- Output of Power Supply = DC 5V
- Oscilloscope range = set 0.5V/div., 5msec/Div.(using scope)

Adjustment 38.9MHz IF(B/G, D/K, I, L, M)

1. Input the signal of the signal generater(38.9MHz) to TP105(IC102 pin 7) through 0.01uF(103) capacitor.
2. S1 : OFF, S2 : IN, S3 : OFF
3. Adjust voltage of the TP103 to 2.5 0.1V by adjusting X106.

L VCO(Adjustment SECAM-L) Adjustment —> Only SECAM L model

1. After changing the signal of the signal generater to 34.25MHz, input the signal to TP102(IC102 pin 11) through 0.01uF(103) capacitor.
2. S1 : on, S2 : off, S3 : ON
3. Adjust voltage of the TP103 to 2.5 0.1V by adjusting VR101.

AGC ADJUSTMENT

1. Connect the signal of PAL-B/G 05ch. to Antenna jack.
2. Connect Multi meter to point(J150) of AGC adjustment.
3. Adjustment the voltage of Multi meter to 2.3 0.1V by changing VR102.

OPTION TABLE

Funtion of Line Service

1. Enter to SVC mode by using SVC button on the remote control. To enter to the SVC mode,press the “OK” button on RTBA10 local key ond “OK” button on the remote control simultaneously. In MT-BA10 only,press the “INPUT” button and “OK” button on remote control to enter to SVC mode.
2. Select the item by using the Quick View(Yellow) button.
3. After adjusting,restore adjusted item in EEPROM by using “OK” button and use the CYAN button to cancel the adjusted condition.
4. Select the program directly and input the data of option by using the number button.
5. Line SVC-0(Hitrun&W/B Adj.mode)=> VSC EEPROM. H/T RUN:OFF,WHITE,RED,GREEN,BLUE,OFF. A/C SRT:Auto Cutoff. R/G/B Fine 16,R/G/B Gain 3,R/G/B Cutoff 100
6. Line SVC-1(Phase&Position Adj.mode)=> VSC EEPROM. Phase 15,H-Pos 32,V-Pos 32,Auto Position
7. VSC CXA2101 Adj.mode)=> VSC EEPROM
8. STB CXA2101 Adj.mode)=> STB EEPROM
9. SOUND Adj.mode => VSC EEPROM
10. Option 1 Adj.mode => VSC EEPROM. Select it directly by using Teletext Size button.
11. Option 2 Adj.mode. Select it directly by using Teletext Hold button.

SERVICE MENU ADJUSTMENTS

If the Main Video Scan Converter module (Part# 809-10722) is installed the unit will come on when A/C is applied. The EEPROM data will be in Factory default values. The following charts and instructions will allow you to set the EEPROM and make necessary adjustments. If the unit will power on prior to the replacement of this Module and the menus can be accessed it would be advisable to record the data from the original EEPROM if possible. The provided Service Remote must be used to make adjustments or access the service menu.

Note: Equipment Needed: NTSC Pattern Generator and DTV Pattern Generator.

ADJUSTMENTS MUST BE DONE IN NTSC AND DTV MODES

NTSC/PC Adjustments

1. Depress the (in-start) key one time, the following menu will appear.

NP-00LE M28037K E.0	Input Settings	
	DTV	NTSC
OPTION	48	48
CXA2101	0	0
CXA2101 STB		
PHASE	12	30
H POSITION	0	0
V POSITION	12	0
OSD POSITION	13	13
PLL-GAIN	17	17
EEPROM INIT		

2. The chart shows starting value settings for adjustments.
3. Use the ***UP*** or ***DOWN*** keys to scroll through the menu and the ***LEFT*** or ***RIGHT*** keys to make the adjustments.
4. To exit the service menu press the (enter) key one time.

DTV Adjustments

1. To Enter this protion of the service menuwith the unit on press the (adj) Key one time. With the unit off you can press the (power on) key two times, this method of access to this menu will automatically set Heat run to WHITE and will allow you to make adjustments.

NOTE: "Heatrun" has the following settings: OFF, WHITE, RED, BLUE, and GREEN.

These are for warm up of the unit as well as testing for defects. This function will also remove minor burn in of the display. NOT FOR SETTING RGB DRIVES.

2. The chart shows starting value settings for adjustments.
3. Use the ***UP*** or ***DOWN*** keys to scroll through the menu and the ***LEFT*** or ***RIGHT*** keys to make the adjustments.
4. To exit this portion of the service menu cycle power off and on.

Heatrun Adjustments		
	NTSC	DTV
VP 0 HEATRUN	OFF	OFF
VP 1 CUTOFF-AUTO		
VP 2 R-FINE	16	16
VP 3 G-FINE	16	16
VP 4 B-FINE	16	16
VP 5 R-GAIN	16	16
VP 6 G-GAIN	10	10
VP 7 B-GAIN	3	3
VP 8 R-CUT	151	161
VP 9 G-CUT	94	95
VP 10 B-CUT	25	26
VP 11 (NTSC) DVCO ADJ	OFOO	
VP 11 (DTV) AUTO PLL		END
VP 12		

OPTION	48
FKO REMOCOM	ZENITH
FKO AREA	USA
FKO LANGUAGE	ENGLISH
FKO SYSTEM	3 SYS
FKO WOOFER	OFF

PC & NTSC Adjustments	
CXA2101	0
VP 0 BCUT	9
VP 1 RCUT	7
VP 2 R-GAIN	10
VP 3 G-GAIN	10
VP 4 B-GAIN	9
VP 5 S CONTRAST	3
VP 6 S BRIGHT	0
VP 7 S-COLOR	6
VP 8 S-TINT	7
VP 9 S-SHARP	3
VP 10 CTI-LEVEL	1
VP 11 R-Y/R	6
VP 12 G-Y/R	10
VP 13 R-Y/B	9
VP 14 G-Y/B	5
VP 15 GAMA	5
VP 16 BLK-BOTTOM	15
VP 17 PRE/OVER	1
VP 18 D-TRAN	1
VP 19 D-PIC	2
VP 20 V-TC	2
VP 21 H-WIDTH	1
VP 22 D-COL	1
VP 23 HD-TC	0
VP 24 SHP-FO	1

PARTS

All DPD models are module level repair only. Parts contact information is below.

Voice: 1-888-3-ZENITH
Fax: 1-888-6-ZENITH
Mail: Zenith National Parts
201 James Record Road
Huntsville, AL 35824-1513

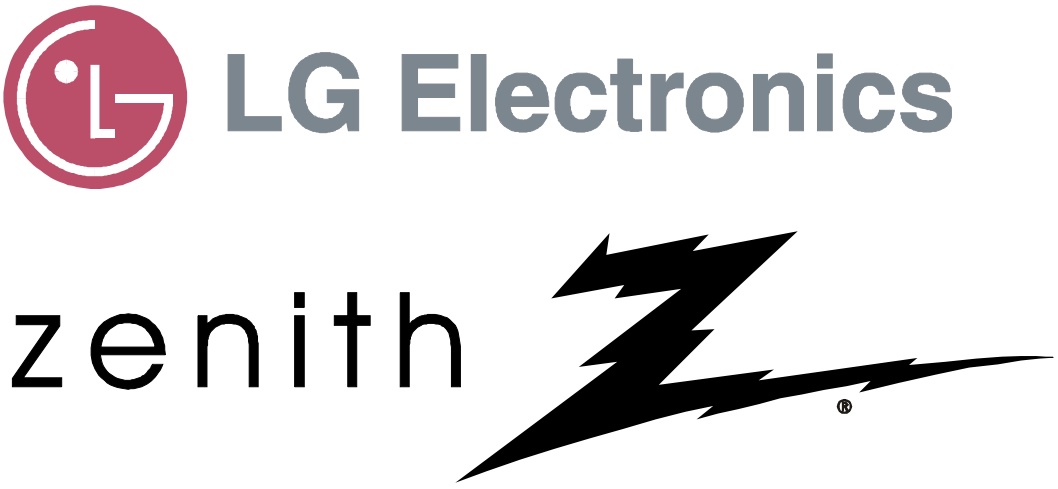
NSP = NON STOCKED PART

MU40PA10B

LOC	PART#	DESCRIPTION
	206-03713	OP GUIDE
	811-10049	AC LINE CORD
	6710V0042J	REMOTE CONTROL
1	3091V00288E	CABINET ASSY, BLACK
2	PART OF 1	FRAME,SIDE
3	PART OF 1	FRAME,TOP
4	PART OF 1	FRAME,SIDE
5	PART OF 1	FRAME,BOTTOM
6	NSP	400 4:3 640*480 DOU PDP
7	PART OF 6	ZCNT TOP B/D ASSY
8	PART OF 6	ZSUS B/D ASSY
9	PART OF 6	ZCNT BOTTOM B/D ASSY
10	PART OF 6	X LEFT BOTTOM B/D ASSY
11	PART OF 6	Vertical
12	809-10721	SYSTEM CTRL B/D ASSY
13	PART OF 6	X RIGHT BOTTOM B/D ASSY
14	PART OF 6	YDRV B/D ASSY
15	PART OF 6	YSUS B/D ASSY
16	PART OF 6	X RIGHT TOP B/D ASSY
17	PART OF 6	X LEFT TOP B/D ASSY
18	809-10723	BOARD ASSY, PDP POWER
19	809-10685	PCB ASSY, SPK NP-00LA MN-40PA10 SPK
20	809-10722	PCB ASSY, MAIN NP-00LA MN-40PA10 VSC
21	895-10140	BOARD ASSY,PDP POWER LINE FILTER
22	809-10683	PCB ASSY,CONT NP-00LA MN-40PA10 CONT
23	959-10111	BUTTON,POWER
24	809-10684	POWER AC SWITCH PCB NP-00LA MN-40PA10
25	814-10206	BACK COVER ASSY
26	812-10158	PLATE ASSY,REAR A/V

DPDP40

LOC	PART#	DESCRIPTION
	206-03713	OP GUIDE
	811-10049	AC LINE CORD
	924-10107	REMOTE CONTROL
1	857-10370	CABINET ASSY
2	PART OF 1	FRAME,SIDE
3	PART OF 1	FRAME,TOP
4	PART OF 1	FRAME,SIDE
5	PART OF 1	FRAME,BOTTOM
6	NSP	400 4:3 640*480 DOU PDP
7	PART OF 6	ZCNT TOP B/D ASSY
8	PART OF 6	ZSUS B/D ASSY
9	PART OF 6	ZCNT BOTTOM B/D ASSY
10	PART OF 6	X LEFT BOTTOM B/D ASSY
11	PART OF 6	Vertical
12	809-10721	SYSTEM CTRL B/D ASSY
13	PART OF 6	X RIGHT BOTTOM B/D ASSY
14	PART OF 6	YDRV B/D ASSY
15	PART OF 6	YSUS B/D ASSY
16	PART OF 6	X RIGHT TOP B/D ASSY
17	PART OF 6	X LEFT TOP B/D ASSY
18	809-10723	BOARD ASSY, PDP POWER
19	809-10685	PCB ASSY, SPK NP-00LA MN-40PA10 SPK
20	809-10722	PCB ASSY, MAIN NP-00LA MN-40PA10 VSC
21	895-10140	BOARD ASSY,PDP POWER LINE FILTER
22	809-10683	PCB ASSY,CONT NP-00LA MN-40PA10 CONT
23	959-10111	BUTTON,POWER
24	809-10684	POWER AC SWITCH PCB NP-00LA MN-40PA10
25	814-10206	BACK COVER ASSY
26	812-10158	PLATE ASSY,REAR A/V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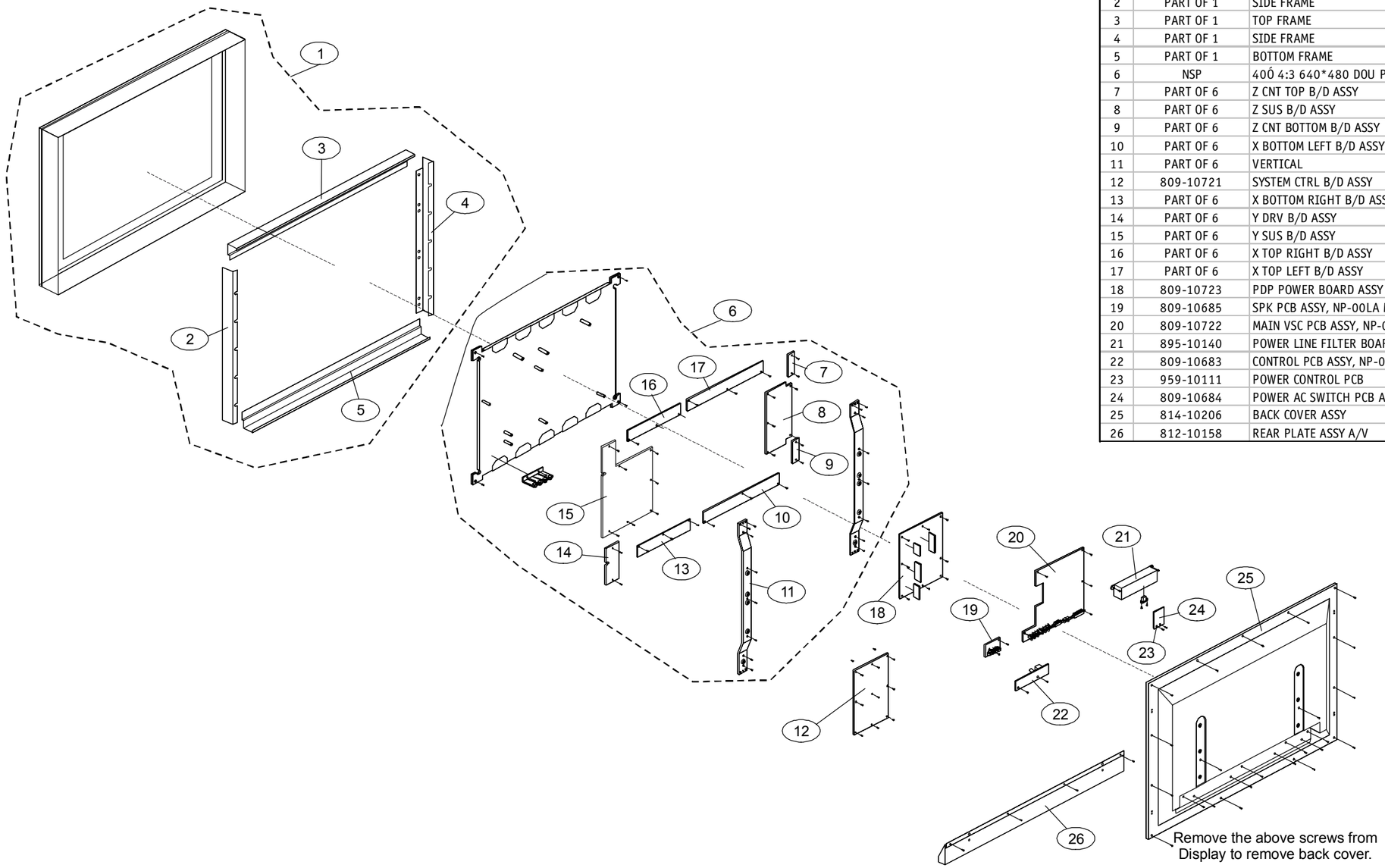
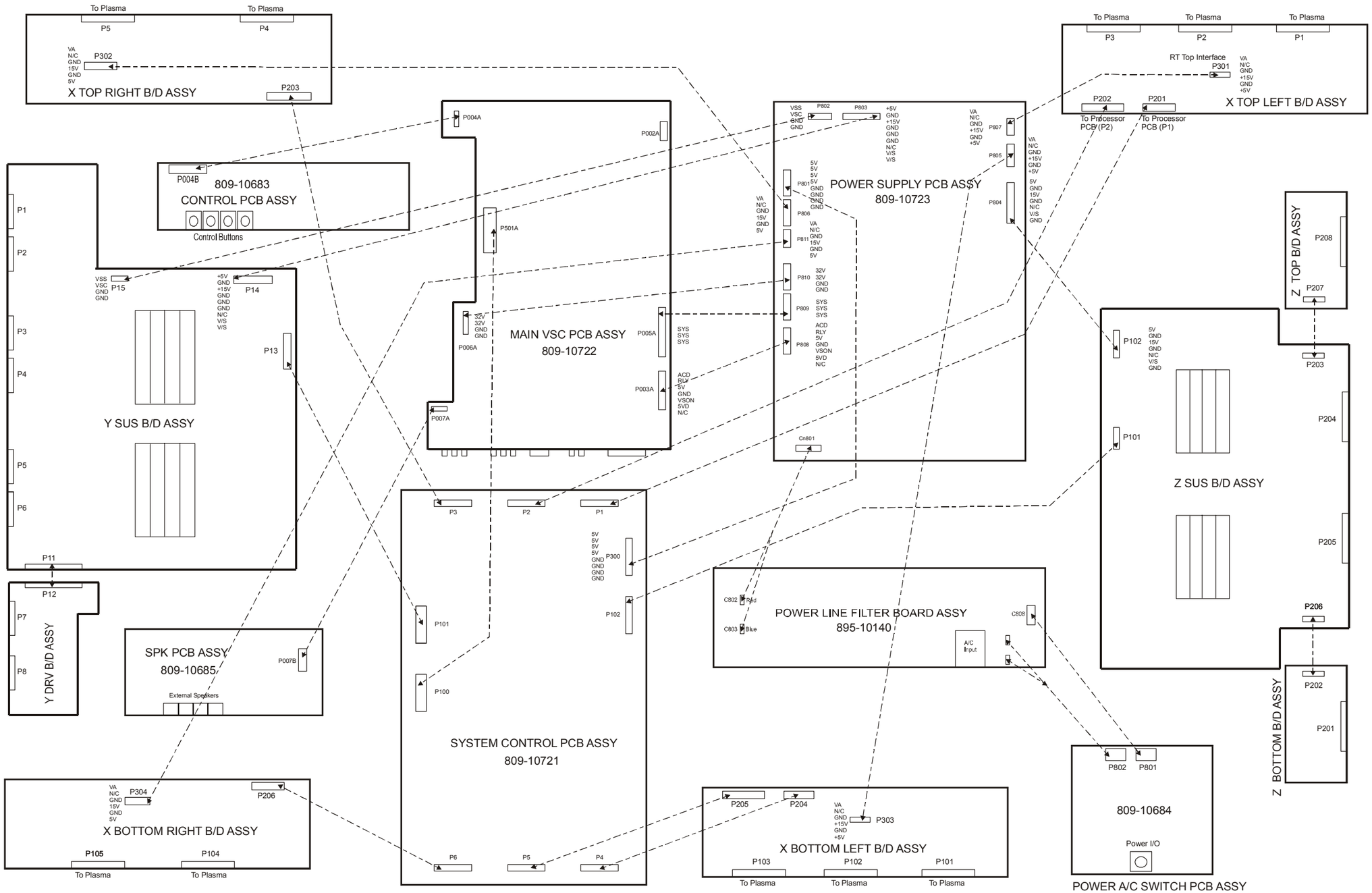
PDP 40" Exploded View

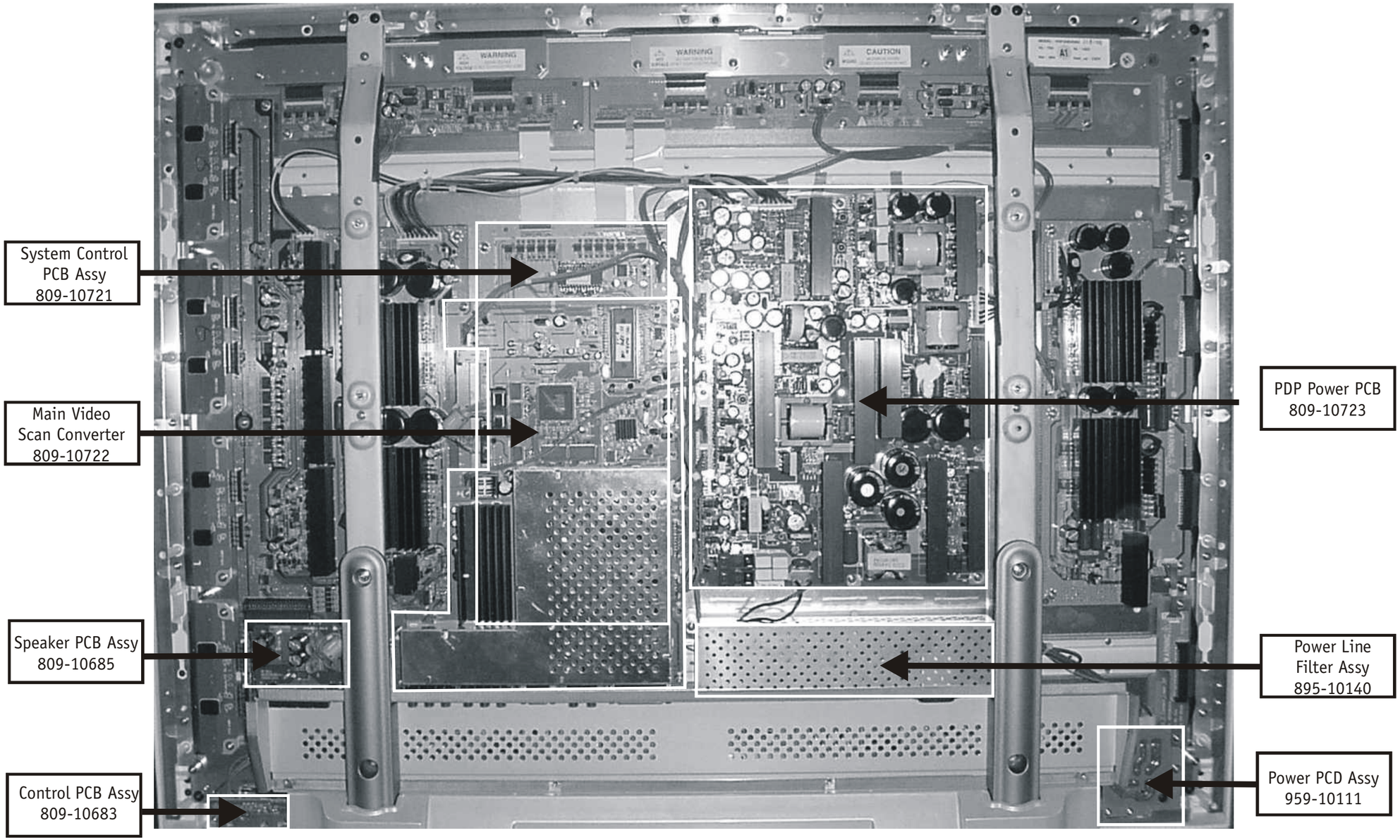


NUM	PART NUMBER	DESCRIPTION
1	SEE PARTS LIST	CABINET ASSY
2	PART OF 1	SIDE FRAME
3	PART OF 1	TOP FRAME
4	PART OF 1	SIDE FRAME
5	PART OF 1	BOTTOM FRAME
6	NSP	40Ó 4:3 640*480 DOU PDP
7	PART OF 6	Z CNT TOP B/D ASSY
8	PART OF 6	Z SUS B/D ASSY
9	PART OF 6	Z CNT BOTTOM B/D ASSY
10	PART OF 6	X BOTTOM LEFT B/D ASSY
11	PART OF 6	VERTICAL
12	809-10721	SYSTEM CTRL B/D ASSY
13	PART OF 6	X BOTTOM RIGHT B/D ASSY
14	PART OF 6	Y DRV B/D ASSY
15	PART OF 6	Y SUS B/D ASSY
16	PART OF 6	X TOP RIGHT B/D ASSY
17	PART OF 6	X TOP LEFT B/D ASSY
18	809-10723	PDP POWER BOARD ASSY
19	809-10685	SPK PCB ASSY, NP-00LA MN-40PA10
20	809-10722	MAIN VSC PCB ASSY, NP-00LA MN-40PA10
21	895-10140	POWER LINE FILTER BOARD ASSY
22	809-10683	CONTROL PCB ASSY, NP-00LA MN-40PA10
23	959-10111	POWER CONTROL PCB
24	809-10684	POWER AC SWITCH PCB ASSY, NP-00LA MN-40PA10
25	814-10206	BACK COVER ASSY
26	812-10158	REAR PLATE ASSY A/V

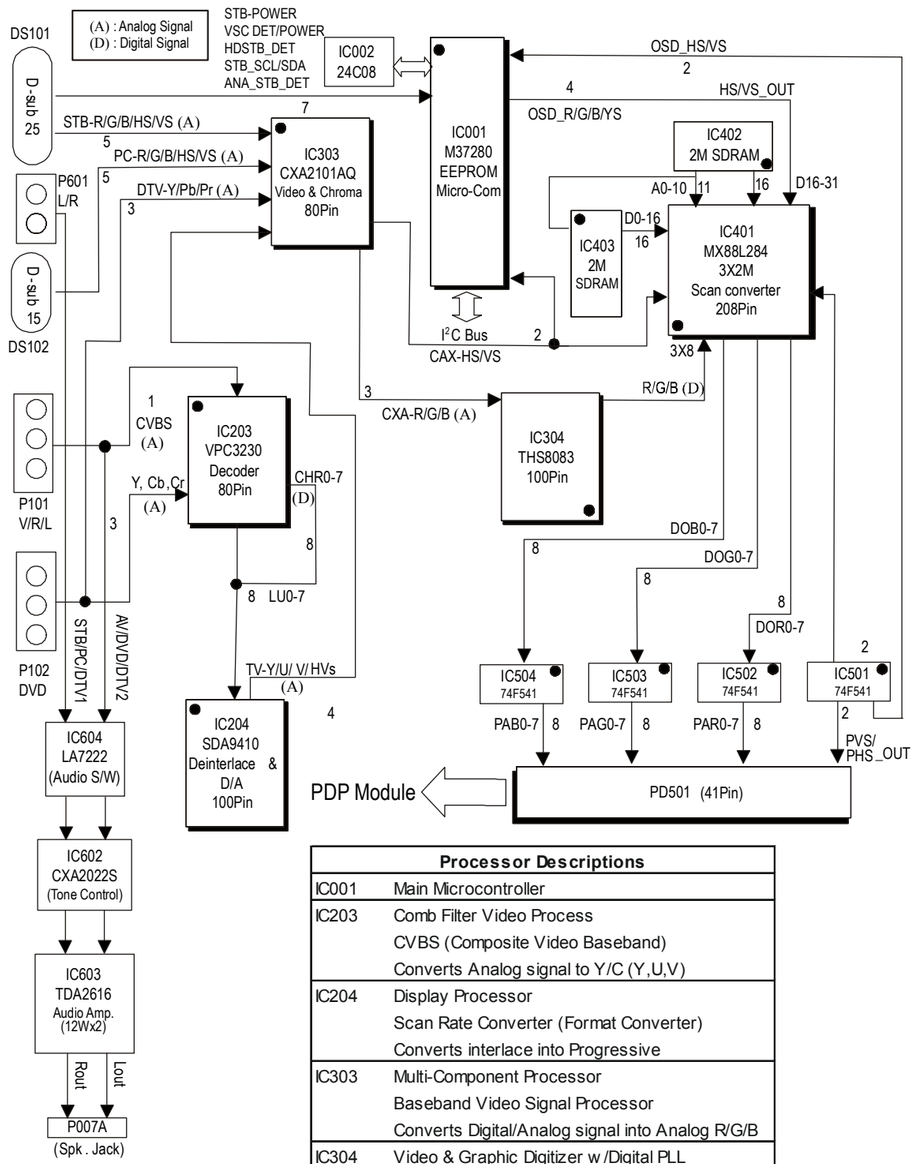
PDP 40" Interconnect



PDP 40" Module Layout

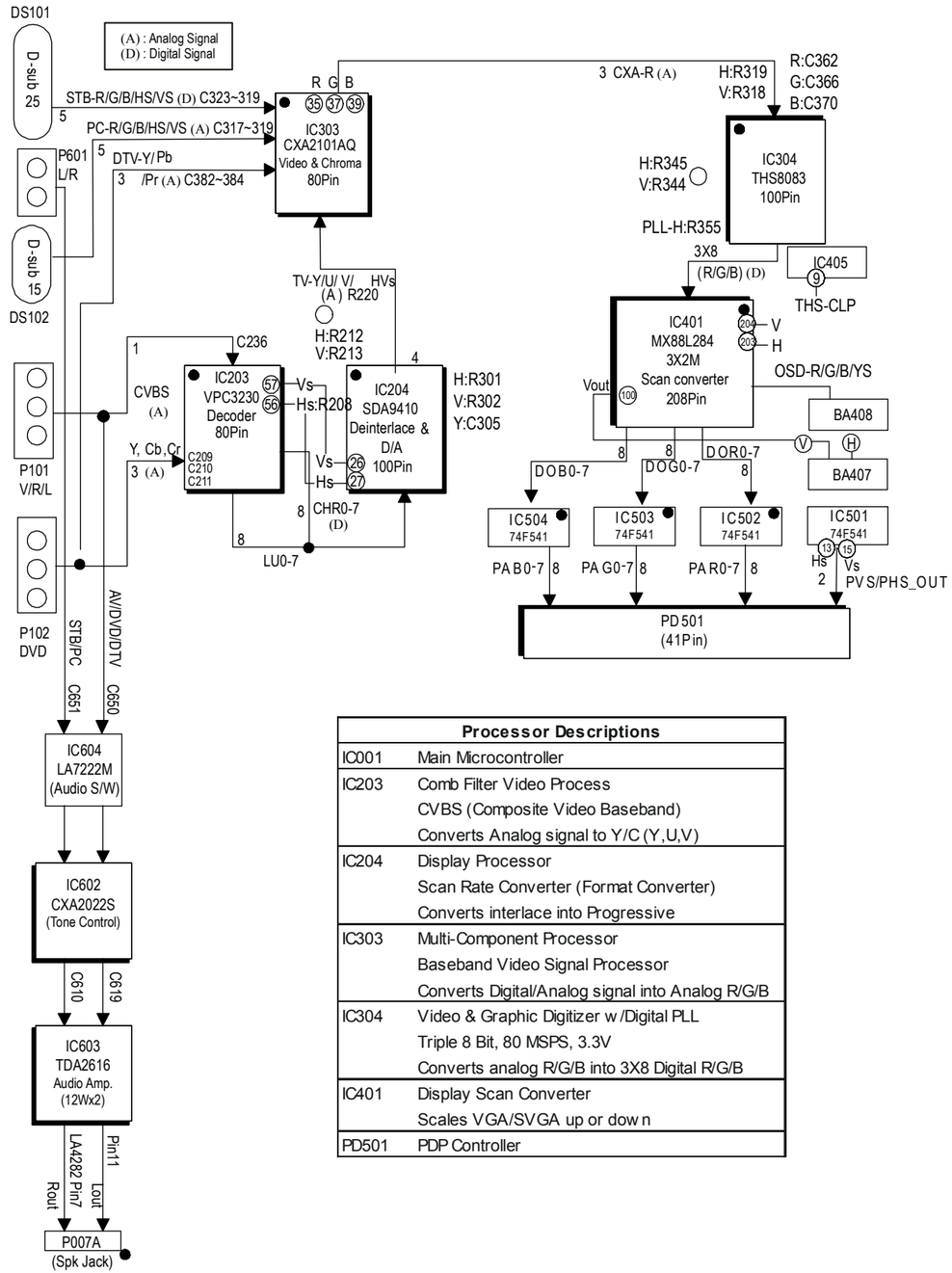


MAIN BLOCK DIAGRAM



Processor Descriptions	
IC001	Main Microcontroller
IC203	Comb Filter Video Process CVBS (Composite Video Baseband) Converts Analog signal to Y/C (Y,U,V)
IC204	Display Processor Scan Rate Converter (Format Converter) Converts interlace into Progressive
IC303	Multi-Component Processor Baseband Video Signal Processor Converts Digital/Analog signal into Analog R/G/B
IC304	Video & Graphic Digitizer w /Digital PLL Triple 8 Bit, 80 MSPS, 3.3V Converts analog R/G/B into 3X8 Digital R/G/B
IC401	Display Scan Converter Scales VGA/SVGA up or dow n
PD501	PDP Controller

DIGITAL SIGNAL FLOW BLOCK DIAGRAM



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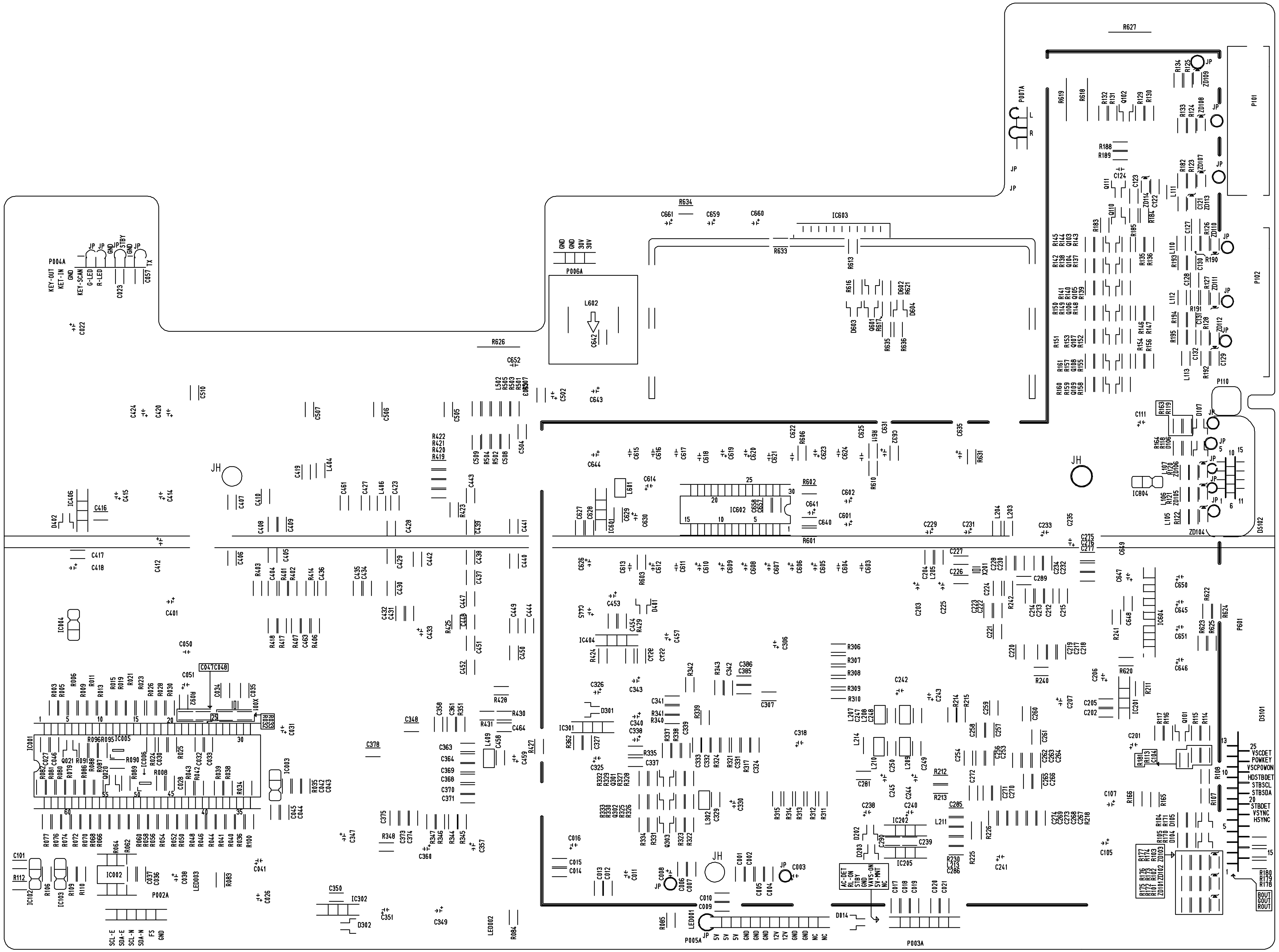
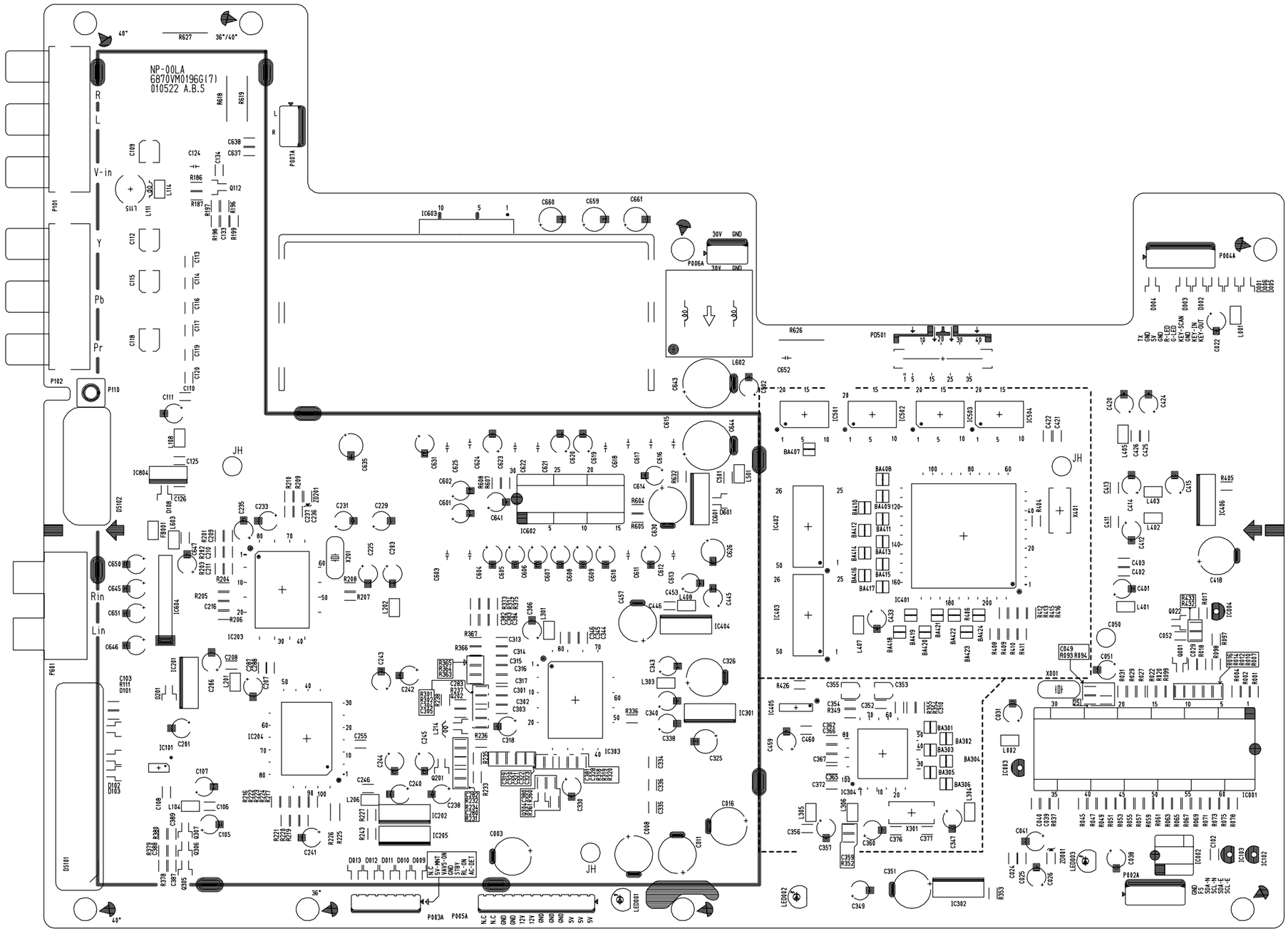
PDP 40" Main PCB Top

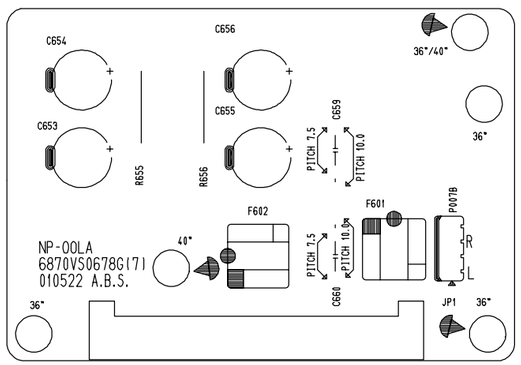


PDP 40" Main PCB Bottom

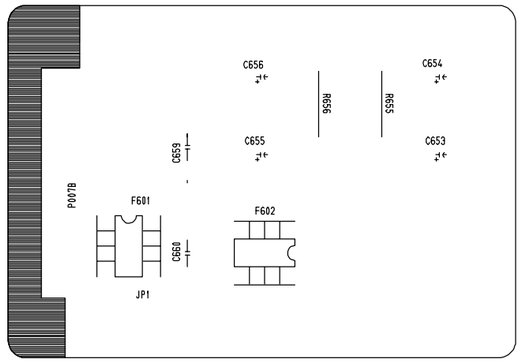


PDP 40" Other PCBs

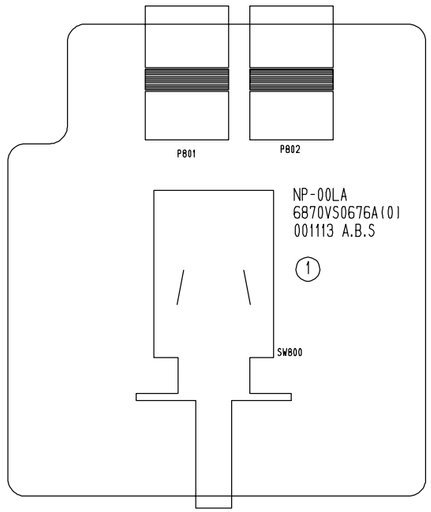
Speaker PCB Top



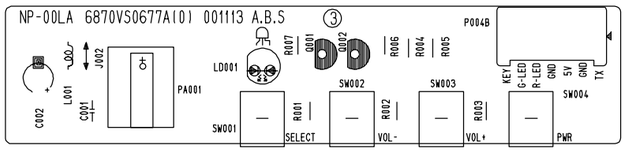
Speaker PCB Bottom



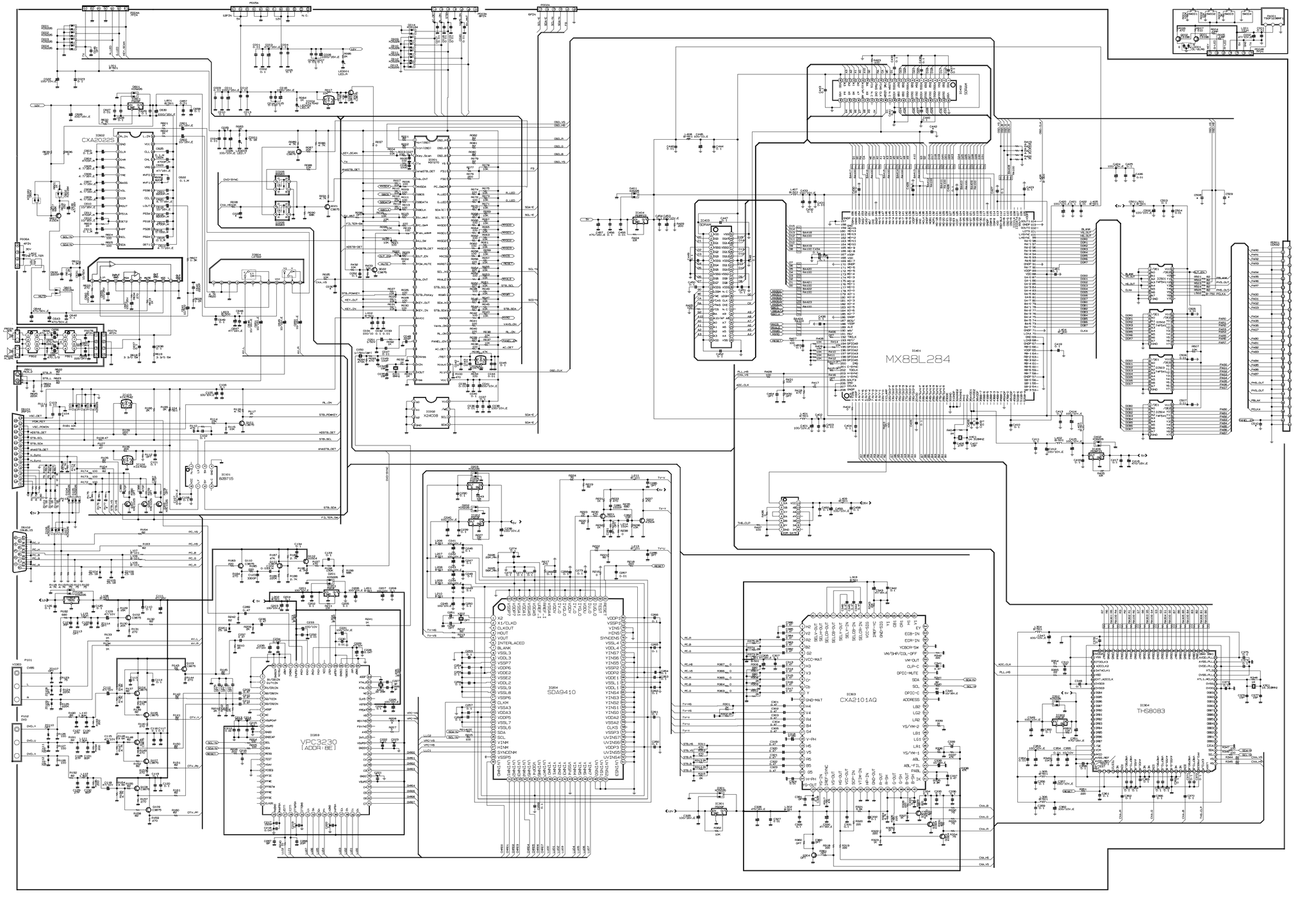
Power Control PCB



Control Panel PCB



DPDP40 Schematic



CRITICAL SAFETY COMPONENTS IN THE SCHEMATIC ARE IDENTIFIED BY THE SYMBOL ⚠ . REPLACE ONLY WITH PART NUMBERS SPECIFIED.